

Harding Lawson Associates

*→ THEIDS/THEIMM mem for Admin
CC: THEIMM action coordination w EC for compliance
THA info
THEIMB*

N00217.002925
HUNTERS POINT
SSIC NO. 5090.3



June 24, 1993

11400 090105

Mr. Raymond Ramos *RR 1/2*
U.S. Navy Western Division
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066

**Sewer - Storm Drain Interconnection
Parcel A/B Boundary near Building 101 & 110
Hunters Point Annex
San Francisco, California**

Dear Mr. Ramos:

This letter summarizes Harding Lawson Associates' preliminary findings regarding the sewer/storm drain interconnection north of Buildings 101 and 110 at the Parcel A/B boundary. The interconnection was recognized during HLA's inspection of the Parcel B storm drain system and was discussed at the Parcel A data presentation meeting on June 10, 1993.

Storm drain manhole inspections were performed in June 1993 to assess the feasibility of conducting video surveys in the line extending north from Robinson Street. The observations made during that inspection and pertinent observations from the Parcel A Sanitary Sewer and Storm Drain Inspections are summarized as follows:

Sanitary Sewer Lines:

PA50SN114 - Sewage present; OVA reading = 200 ppm

PA50SN111 - Copious sewage present

PA50SN109 - Sewage odor; OVA reading = 50 ppm

Storm Drains:

PA50SW124 - No sewage observed, but a faint odor present

PA50SW219 - Slight sewage odor

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PA50SW218 - Strong sewage odor, sewage appears to flow into this manhole via a 27- to 30-inch-diameter pipe. The sewage inflow pipe deviates slightly east from the storm drain inlet. Combined storm/sewage flows move toward flood control structure FC212.

PA50FC212 - Visible evidence of sewage and odor

These observations indicate sewage from the sanitary sewer servicing Buildings 101 and/or 110 (green on attached plate) enters the storm drain system (blue) at PA50SW218. The Navy Control Diagram (1950) shows two combined storm and sewer lines extending downslope from Robinson Street to the Tank Farm. The easternmost of the two lines (colored pink) approximates the orientation of the sewer line entering PA50SW218.

Based on this preliminary data, it appears that at least one of the pre-1950 combined sewer-storm lines is still active and interconnects sewage from Parcel A with the storm drain system in Parcel B.

If you have any questions, please contact me at (415) 899-7358.

Very truly yours,

HARDING LAWSON ASSOCIATES

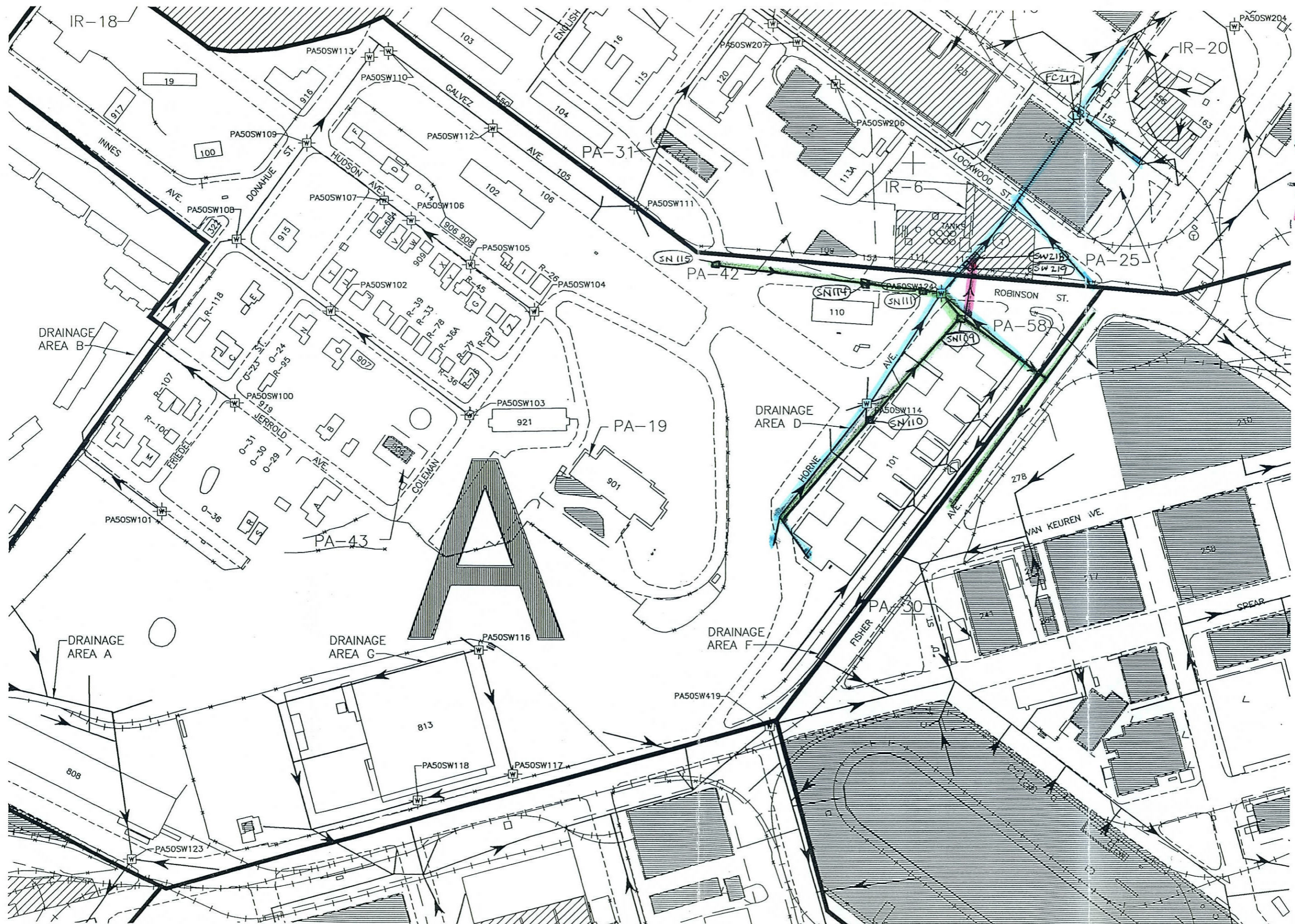

Carl J. Michelsen
Assistant Project Manager

Attachments:






Parcel A Storm Drain Map with Sanitary Sewers near Building 101 and 110
Navy Control Diagram, Storm and Sanitary Sewers, 1950
PA50SW218 HLA Field Sketch

cc: Jim Sullivan, WestDiv
Gary Welshans, PRC

CJM/jlw30044-prc



EXPLANATION

-  STORM DRAIN
-  SEWER LINE
-  COMBINED LINE (1950)
-  SW 218: STORM DRAIN MANHOLE
-  SN 101: SEWER LINE MANHOLE

SEWER

DS 648949
648950

OR
ONAL

SATISFACTORY TO

HJF

SCALE 1" = 200'

DRAWN BY DEM
TRACED BY DEM
CHECKED BY

ARCHITECT
STRUCT. ENG.
MECH. ENG.
CIVIL ENG. TKD

CHIEF OF MN. [Signature]
PROJ. MGR.
MR. P. B. N.
DESIGN SUPT.

SHEET OF
ACCOMPANYING SPECIF.

NO.
NOY.

P. W. DRAWING NO.
16013-143

NAVY DEPARTMENT

BUREAU OF CHARGE & DOCK

SAN FRANCISCO NAVAL SHIPYARD

SAN FRANCISCO, CALIFORNIA

CONTROL DIAGRAM

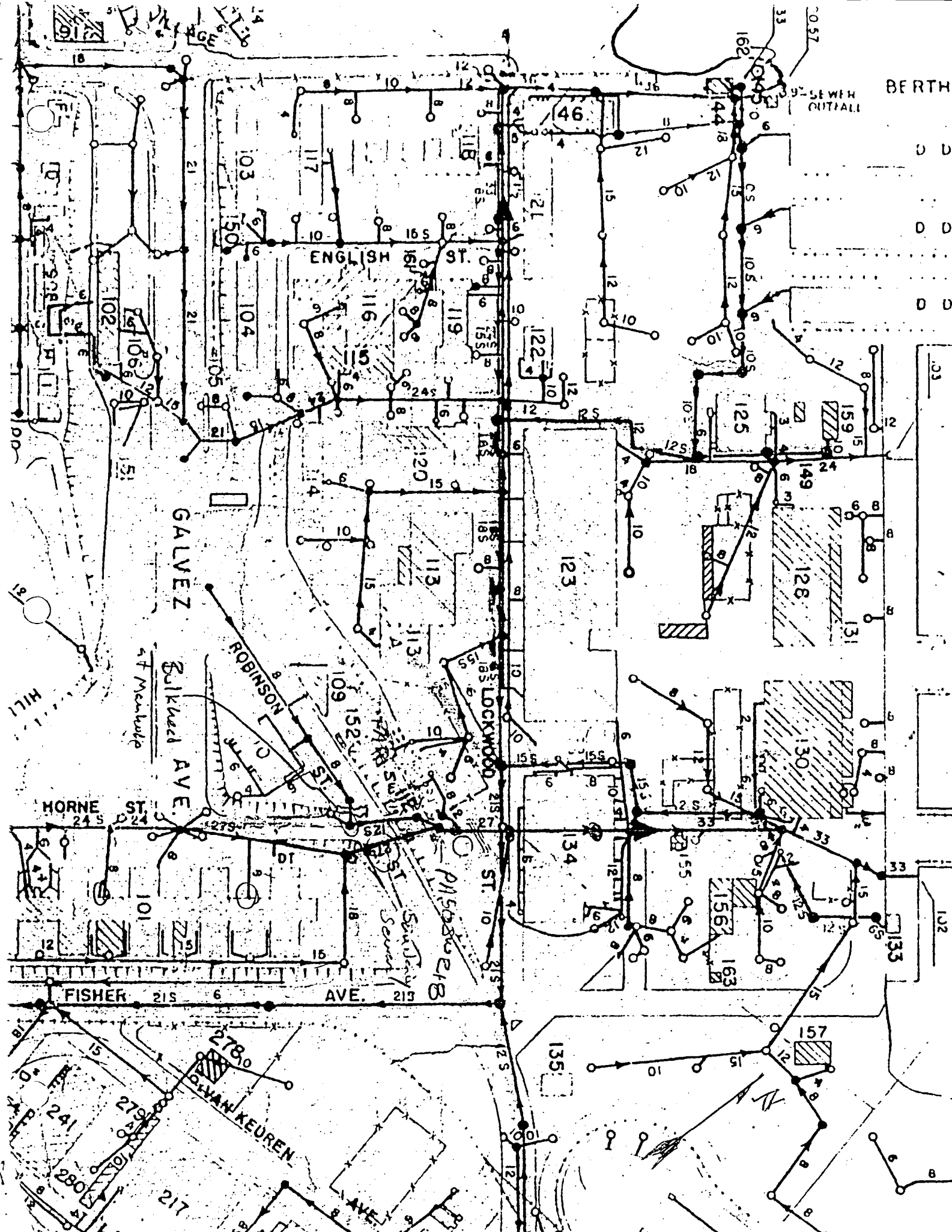
**STORM & SANITARY
SEWERS**

APPROVED 4 October 1950

[Signature]

PUBLIC WORKS SERVICE

Y. B. DRAWING NO.



BIRTH

SEWER OUTFALL

ENGLISH ST.

GALVEZ AVE.

ROBINSON ST.

LOCKWOOD ST.

HORNE ST.

FISHER AVE.

OLIVAN KEUREN

N

HARDING LAWSON ASSOCIATES

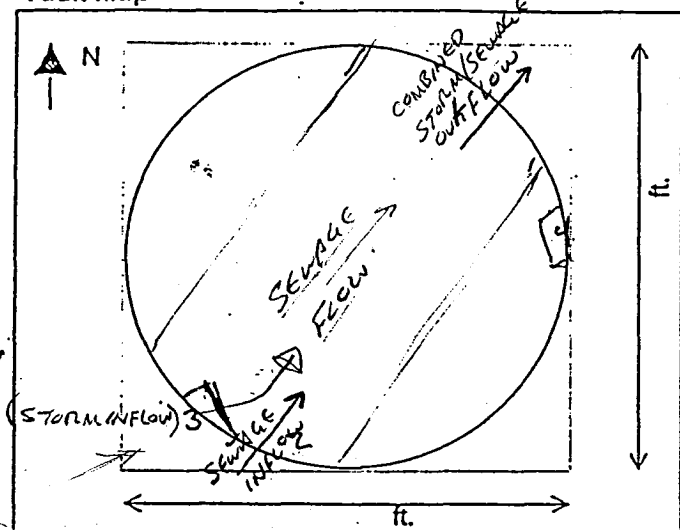
Sanitary Sewer & Storm Drain Inspection & Sampling

Hunters Point Annex

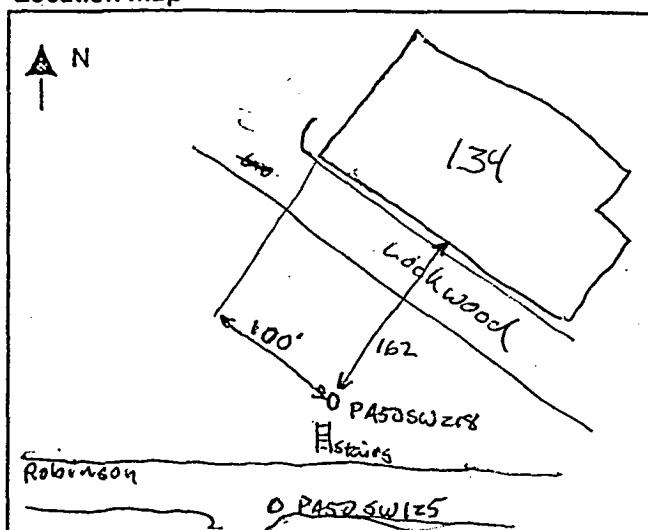
Location #: PAS0SW219		Parcel #: B	
Type of Structure		Vault construction	
<input checked="" type="checkbox"/> Sanitary Sewer	<input checked="" type="checkbox"/> Brick		
<input checked="" type="checkbox"/> Storm Drain	<input type="checkbox"/> Precast		
Catch Basin	Vault cover		
Other:	<input checked="" type="checkbox"/> Solid	<input type="checkbox"/> Square	
	<input type="checkbox"/> Grate	<input checked="" type="checkbox"/> Circle	
Grate opening:			

Job #: 11400 090103
Logged by: DL Fowler
Date: 6-4-93
Time: 1256
Proj. Mgr.:
Edited by:
Weather Conditions: showers
Ground surface material: dirt

Vault Map



Location Map



Pipe Information

Pipe #	Connects to Site #	Flow Direction	Flow Rate	Diameter (in.)	Height off Bottom (ft)	Material	Comments
1		Out	slow	30	on bottom	clay	
2		In	slow	30	on bottom	clay	
3	SW219	In	Ø	12	3	clay	
4		In	Ø	6	3	clay	
5		In					
6		In					
7		In					

Vault Information

Invert depth (TD)	: 5	Sediment depth:	unknown
Depth to water below rim	: 4.8	Sediment type:	Bricks, Pipe fragments, sand
Depth of water	: 0.2	Flow Rate (fast, slow, stagnant):	
OVA/Gastech readings:	4 ppm	Photo # / direction of view:	
Evidence of contamination:	strong sanitary sewer odor, water is grayish in color		
Vault conditions/other observations:			
Sample number(s)/matrix:			